

DOCKET NO. **SA- 516**

EXHIBIT NO. **19B**

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C**

ATTACHMENTS TO

**MEDICAL/FORENSIC
GROUP CHAIRMAN'S FACTUAL
REPORT OF INVESTIGATION**

FLIGHTCREW TOXICOLOGICAL REPORTS (7)

DATA MAPING (28 CHARTS)

BODY RECOVERY LOCATION PLOT (1 CHART)

DIVISION OF MEDICAL-LEGAL INVESTIGATIONS AND FORENSIC SCIENCES
SUFFOLK COUNTY, NEW YORK

TOXICOLOGIC REPORT

NAME CAMPBELL, RICHARD CHEMICAL NO. 2193-96 M.E. NO. 96-5283

ANALYSIS PERFORMED GENERAL UNKNOWN

SPECIMENS SUBMITTED BRAIN, LIVER, FEMORAL BLOOD, CHEST FLUID, MUSCLE, BILE,
EDTA TUBE OF CHEST FLUID, VITREOUS FLUID

SPECIMENS USED FOR ANALYSIS BRAIN, LIVER, FEMORAL BLOOD, CHEST FLUID,
BILE

RESULTS

BRAIN - ETHANOL PRESENT 0.01% (8-5-96)

BRAIN - OTHER VOLATILE SUBSTANCES NOT DETECTED (8-5-96)

FEMORAL BLOOD - ETHANOL PRESENT 0.01% (8-5-96)

LIVER - ETHANOL PRESENT 0.02% (8-5-96)

BILE - ETHANOL PRESENT 0.01% (8-5-96)

FEMORAL BLOOD - CARBON MONOXIDE NOT DETECTED (8-3-96)

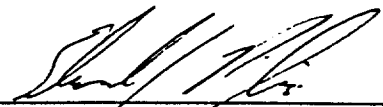
CHEST FLUID - BARBITURATES, STRONG ACIDS AND NEUTRAL DRUGS NOT DETECTED
(8-5-96)

CHEST FLUID - BARBITURATES, OPIATES, AMPHETAMINES, METHADONE, PROPOXYPHENE,
ACETAMINOPHEN, COCAINE METABOLITES, BENZODIAZEPINE METABOLITES,
PCP, AND TETRAHYDROCANNABINOL METABOLITES NOT DETECTED (8-5-96)

LIVER - BASIC DRUGS NOT DETECTED (8-5-96)

LIVER - HEAVY METALS NOT DETECTED (8-5-96)

Date _____
Reviewed by: STEPHANIE A. HOROWITZ, M.D.
DEPUTY MEDICAL EXAMINER

 Date 11/12/96
EDWARD J. BRIGLIA, Ph.D.
CHIEF - TOXICOLOGY LABORATORY

DATE TYPED 11-18-96 BAK



THESE RECORDS MAY BE RELEASABLE UNDER THE FOIA REQUEST 15 DAYS AFTER SIGNATURE DATE UNLESS WE HEAR OTHERWISE FROM FAA OR NTSB COUNSEL.

U.S. Department
of Transportation

Federal Aviation
Administration

Mike Monroney
Aeronautical Center

P.O. Box 25082
Oklahoma City, Oklahoma 73125

August 15, 1996

National Transportation Safety Board
2001 Route 46, Suite 203
Parsippany, NJ 07054

CASE#: 9600172001 NAME: CAMPBELL, RICHARD G. JR Putrefied: No
DATE OF INCIDENT : 071796 DATE RECEIVED: 072096
LOCATION OF ACCIDENT: EAST MORICHES, NY
SPECIMENS RECEIVED : Serum, Bile, Liver, Lung, Kidney, Muscle, Brain
Heart

FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT

CARBON MONOXIDE:

Carbon monoxide analysis was not performed due to a lack of suitable specimen.

CYANIDE:

Cyanide analysis was not performed due to a lack of suitable specimen.

VOLATILES: The volatile concentrations were determined by headspace gas chromatography at a cutoff of 10 mg/dl. All positive ethanols were confirmed by Radiative Energy Attenuation.

- > 27.000 (mg/dl) Ethanol detected in Muscle Fluid
- > 13.000 (mg/dl) Ethanol detected in Lung Fluid
- > 1.000 (mg/dl) Acetaldehyde detected in Lung Fluid
- > 1.000 (mg/dl) Acetone detected in Lung Fluid

NOTE: The ethanol found in this case may be the result of postmortem ethanol production.

DRUGS: Immunoassay was used to screen for illegal drugs which include amphetamine(0.010), opiates(0.010), marihuana(0.001), cocaine(0.020), phencyclidine(0.002), benzodiazepines(0.030), and barbiturates(0.060). The values in () are the threshold values in ug/ml used to report positive results. Values below this concentration are normally reported as not detected.

GC/Mass Spec, or GC/FTIR, is used to confirm most positive results.

--> NO Drugs detected in Muscle Fluid

Dennis V. Canfield AUG 15 1996

Dennis V. Canfield, Ph.D.
Manager Toxicology and Accident
Research Laboratory

DIVISION OF MEDICAL-LEGAL INVESTIGATIONS AND FORENSIC SCIENCES
SUFFOLK COUNTY, NEW YORK

TOXICOLOGIC REPORT

NAME KEVORKIAN, RALPH CHEMICAL NO. 2192-96 M.E. NO. 96-5278

ANALYSIS PERFORMED GENERAL UNKNOWN

SPECIMENS SUBMITTED LIVER, CHEST BLOOD, BILE, URINE, STOMACH CONTENTS,
MUSCLE, SPLEEN, HEAD HAIR

SPECIMENS USED FOR ANALYSIS LIVER, BILE, CHEST BLOOD, URINE, STOMACH
CONTENTS

RESULTS

LIVER - ETHANOL NOT DETECTED (8-5-96)

LIVER - OTHER VOLATILE SUBSTANCES NOT DETECTED (8-5-96)

BILE - ETHANOL NOT DETECTED (8-5-96)

CHEST BLOOD - ETHANOL PRESENT 0.02% (8-5-96)

URINE - ETHANOL PRESENT LESS THAN 0.01% (8-5-96)

STOMACH CONTENT - ETHANOL PRESENT 0.01% (8-5-96)

CHEST BLOOD - CARBON MONOXIDE NOT DETECTED (8-4-96)

CHEST BLOOD - BARBITURATES, STRONG ACIDS AND NEUTRAL DRUGS NOT DETECTED
(8-5-96)

URINE - BARBITURATES, OPIATES, AMPHETAMINES, METHADONE, PROPOXYPHENE, PCP,
ACETAMINOPHEN, COCAINE METABOLITES, BENZODIAZEPINE METABOLITES,
AND TETRAHYDROCANNABINOL METABOLITES NOT DETECTED (8-5-96)

LIVER - BASIC DRUGS NOT DETECTED (8-5-96)

LIVER - HEAVY METALS NOT DETECTED (8-5-96)

Date

Reviewed by: BARBARA WOLF, M.D.
PATHOLOGIST, SEMO

Date 11/18/96

Edward J. Briglia
EDWARD J. BRIGLIA, Ph.D.
CHIEF - TOXICOLOGY LABORATORY

DATE TYPED 11-18-96 BAK



U.S. Department
of Transportation

Federal Aviation
Administration

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AFTER SIGNATURE DATE UNLESS WE HEAR OTHERWISE FROM FAA OR NTSB
COUNSEL.

Mike Monroney
Aeronautical Center

P.O. Box 25082
Oklahoma City, Oklahoma 73125

August 16, 1996

National Transportation Safety Board
2001 Route 46, Suite 203
Parsippany, NJ 07054

CASE#: 9600172003 NAME: KEVORKIAN, RALPH G. Putrefied: Yes
DATE OF INCIDENT : 071796 DATE RECEIVED: 080696
LOCATION OF ACCIDENT: EAST MORICHES, NY
SPECIMENS RECEIVED : Blood, Urine, Bile, Gastric Contents, Liver
Lung, Kidney, Spleen, Muscle

FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT

CARBON MONOXIDE: The carboxyhemoglobin saturation was determined by spectrophotometry with a 10% cut off.

--> NO Carboxyhemoglobin detected in Blood

CYANIDE: The presence of cyanide was screened by Conway Diffusion. Positive cyanides are quantitated using spectrophotometry. The limit of quantitation of cyanide is 0.25 ug/ml. Normal blood cyanide concentrations are less than 0.15 ug/ml while lethal concentrations are greater than 3ug/ml.

--> NO Cyanide detected in Blood

VOLATILES: The volatile concentrations were determined by headspace gas chromatography at a cutoff of 10 mg/dl. All positive ethanols were confirmed by Radiative Energy Attenuation.

--> NO Ethanol detected in Urine

DRUGS: Immunoassay and chromatography are used to screen for legal and illegal drugs which include amphetamine(0.010), opiates(0.010), marihuana(0.001), cocaine(0.020), phencylidine(0.002), benzodiazepines(0.030), barbiturates(0.060), antidepressants(0.100), antihistamines(0.020), meprobamate(0.100), methaqualone(0.100), and nicotine(0.050). The values in () are the threshold values in ug/ml used to report positive results. Values below this concentration are normally reported as not detected.

GC/Mass Spec, or GC/FTIR, is used to confirm most positive results.

--> NO Drugs detected in Blood

John Soga, Ph.D. for AUG 16 1996

Dennis V. Canfield, Ph.D.
Manager Toxicology and Accident
Research Laboratory

page 1/1

DIVISION OF MEDICAL-LEGAL INVESTIGATIONS AND FORENSIC SCIENCES
SUFFOLK COUNTY, NEW YORK

TOXICOLOGIC REPORT

NAME KRICK, OLIVER CHEMICAL NO. 2131-96 M.E. NO. 96-5162

ANALYSIS PERFORMED GENERAL UNKNOWN

SPECIMENS SUBMITTED BRAIN, LIVER, CHEST BLOOD, BILE, URINE, STOMACH
CONTENTS, PSOAS MUSCLE, SPLEEN

SPECIMENS USED FOR ANALYSIS BRAIN, LIVER, CHEST BLOOD, BILE, URINE,
STOMACH CONTENTS

RESULTS

CHEST BLOOD - ETHANOL PRESENT 0.02% (7-26-96)

CHEST BLOOD - OTHER VOLATILE SUBSTANCES NOT DETECTED (7-26-96)

LIVER - ETHANOL PRESENT 0.01% (7-26-96)

URINE - ETHANOL PRESENT LESS THAN 0.01% (7-26-96)

BILE - ETHANOL NOT DETECTED (7-26-96)

BRAIN - ETHANOL NOT DETECTED (7-26-96)

STOMACH CONTENT - ETHANOL NOT DETECTED (7-26-96)


CHEST BLOOD - CARBON MONOXIDE PRESENT LESS THAN 5% SATURATION (7-26-96)

LIVER - BARBITURATES, STRONG ACIDS AND NEUTRAL DRUGS NOT DETECTED (7-26-96)

CHEST BLOOD - BARBITURATES, OPIATES, AMPHETAMINES, METHADONE, PROPOXYPHENE,
ACETAMINOPHEN, COCAINE METABOLITES, BENZODIAZEPINE METABOLITES,
PCP, AND TETRAHYDROCANNABINOL METABOLITES NOT DETECTED (7-26-96)

LIVER - BASIC DRUGS NOT DETECTED (7-26-96)

Date _____
Reviewed by: GWEN HARLEMAN, M.D.
DEPUTY MEDICAL EXAMINER

 Date 9/30/96
EDWARD J. BRIGLIA, Ph.D.
CHIEF - TOXICOLOGY LABORATORY

DATE TYPED 7-30-96 BAK

DIVISION OF MEDICAL-LEGAL INVESTIGATIONS AND FORENSIC SCIENCES
SUFFOLK COUNTY, NEW YORK

TOXICOLOGIC REPORT

NAME KRICK, OLIVER CHEMICAL NO. 2131-96 M.E. NO. 96-5162

ANALYSIS PERFORMED CARBON MONOXIDE

SPECIMENS SUBMITTED BRAIN, LIVER, CHEST BLOOD, BILE, URINE, STOMACH
CONTENTS, PSOAS, SPLEEN

SPECIMENS USED FOR ANALYSIS CHEST BLOOD

RESULTS:

CHEST BLOOD - CARBON MONOXIDE PRESENT LESS THAN 5% SATURATION (7-26-96)

Reviewed by: Date
GWEN HARLEMAN, M.D.
DEPUTY MEDICAL EXAMINER

 Date
EDWARD J. BRIGLIA, Ph.D.
CHIEF - TOXICOLOGY LABORATORY

DATE TYPED 7-30-96 BAK



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U.S. Department
of Transportation

Federal Aviation
Administration

Mike Monroney
Aeronautical Center

P.O. Box 25082
Oklahoma City, Oklahoma 73125

August 02, 1996

National Transportation Safety Board
2001 Route 46, Suite 203
Parsippany, NJ 07054

CASE#: 9600172002 NAME: KRICK, OLIVER Putrefied: Yes
DATE OF INCIDENT : 071796 DATE RECEIVED: 072796
LOCATION OF ACCIDENT: EAST MORICHES, NY
SPECIMENS RECEIVED : Blood, Bile, Gastric Contents, Liver, Lung
Kidney, Spleen, Muscle, Brain, Heart

FORENSIC TOXICOLOGY FATAL ACCIDENT REPORT

CARBON MONOXIDE: The carboxyhemoglobin saturation was determined by spectrophotometry with a 10% cut off.

--> NO Carboxyhemoglobin detected in Blood

CYANIDE: The presence of cyanide was screened by Conway Diffusion. Positive cyanides are quantitated using spectrophotometry. The limit of quantitation of cyanide is 0.25 ug/ml. Normal blood cyanide concentrations are less than 0.15 ug/ml while lethal concentrations are greater than 3ug/ml.

--> NO Cyanide detected in Blood

VOLATILES: The volatile concentrations were determined by headspace gas chromatography at a cutoff of 10 mg/dl. All positive ethanol were confirmed by Radiative Energy Attenuation.

--> 29.000 (mg/dl) Ethanol detected in Blood
--> 15.000 (mg/dl) Ethanol detected in Heart Fluid
--> 19.000 (mg/dl) Ethanol detected in Muscle Fluid
--> 2.000 (mg/dl) Acetaldehyde detected in Blood

NOTE: The ethanol found in this case is most likely from postmortem ethanol production.

DRUGS: Immunoassay and chromatography are used to screen for legal and illegal drugs which include amphetamine(0.010), opiates(0.010), marihuana(0.001), cocaine(0.020), phencyclidine(0.002), benzodiazepines(0.030), barbiturates(0.060), antidepressants(0.100), antihistamines(0.020), meprobamate(0.100), methaqualone(0.100), and nicotine(0.050). The values in () are the threshold values in ug/ml used to report positive results. Values below this concentration are normally reported as not detected.

GC/Mass Spec, or GC/FTIR, is used to confirm most positive results.

--> NO Drugs detected in Blood

Dennis V. Canfield TAG 2 1996

Dennis V. Canfield, Ph.D.
Manager Toxicology and Accident
Research Laboratory

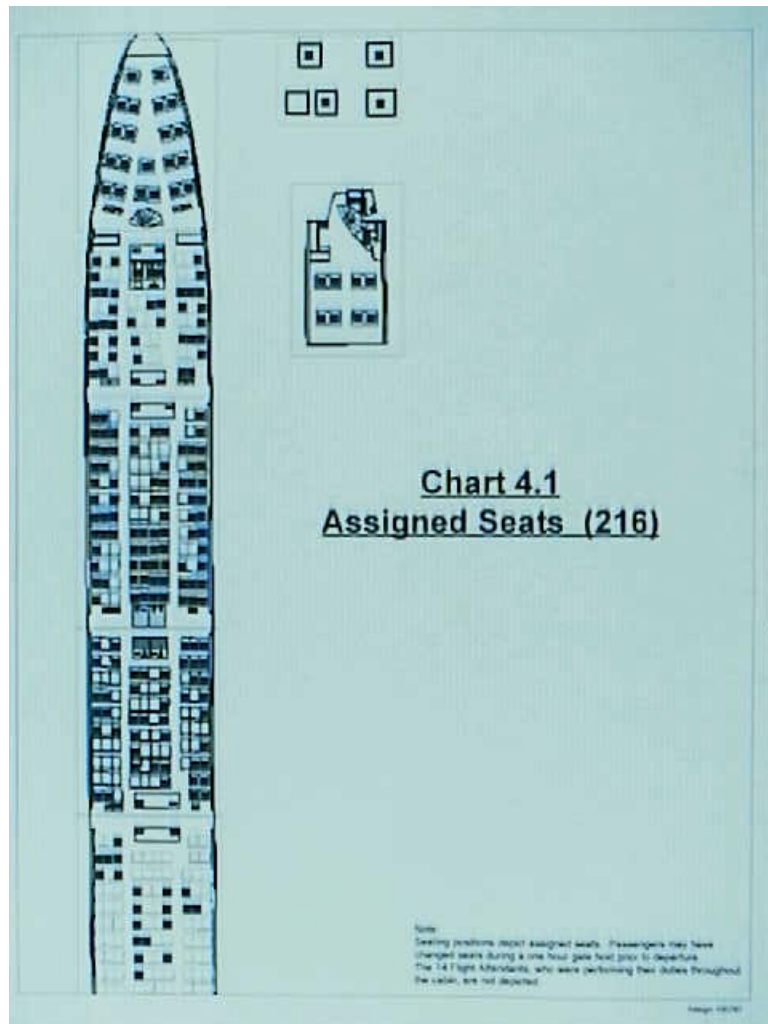


Chart 4.1 - Assigned Seats (216)

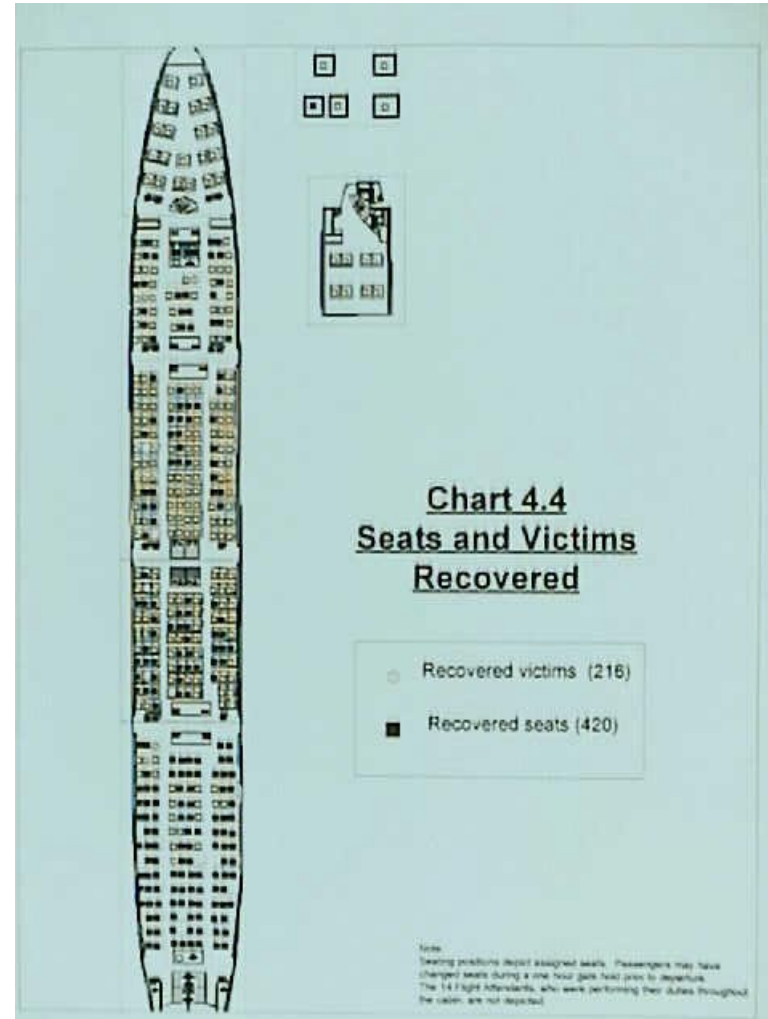


Chart 4.4 Seats and Victims Recovered

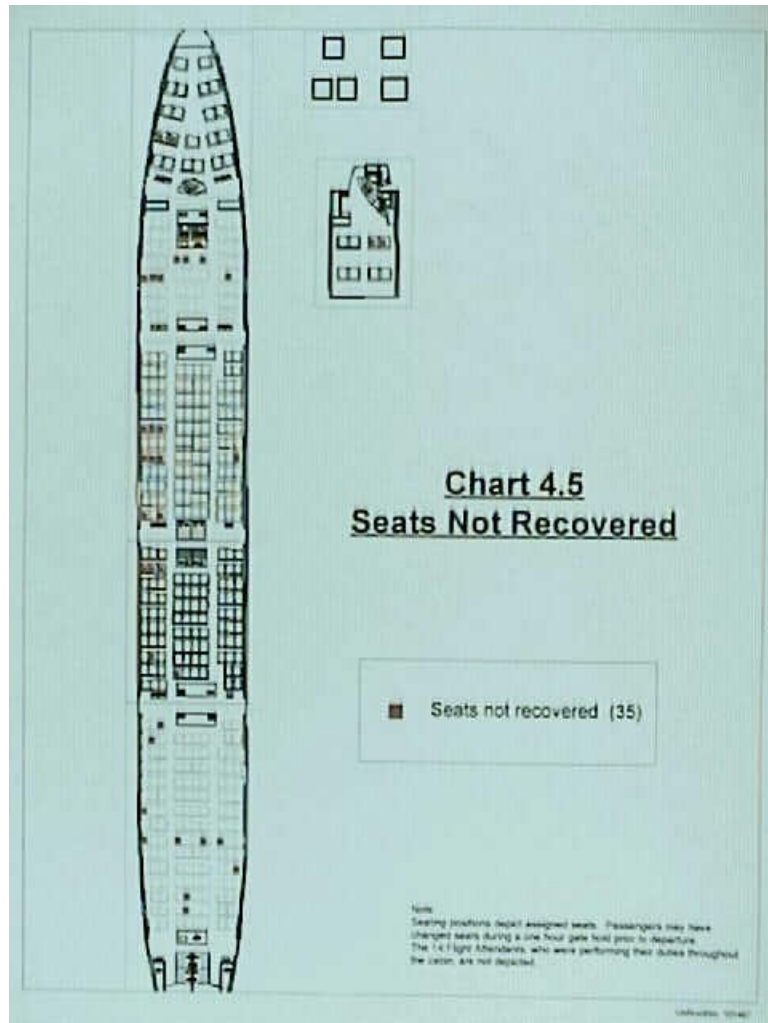


Chart 4.5 Seats Not Recovered

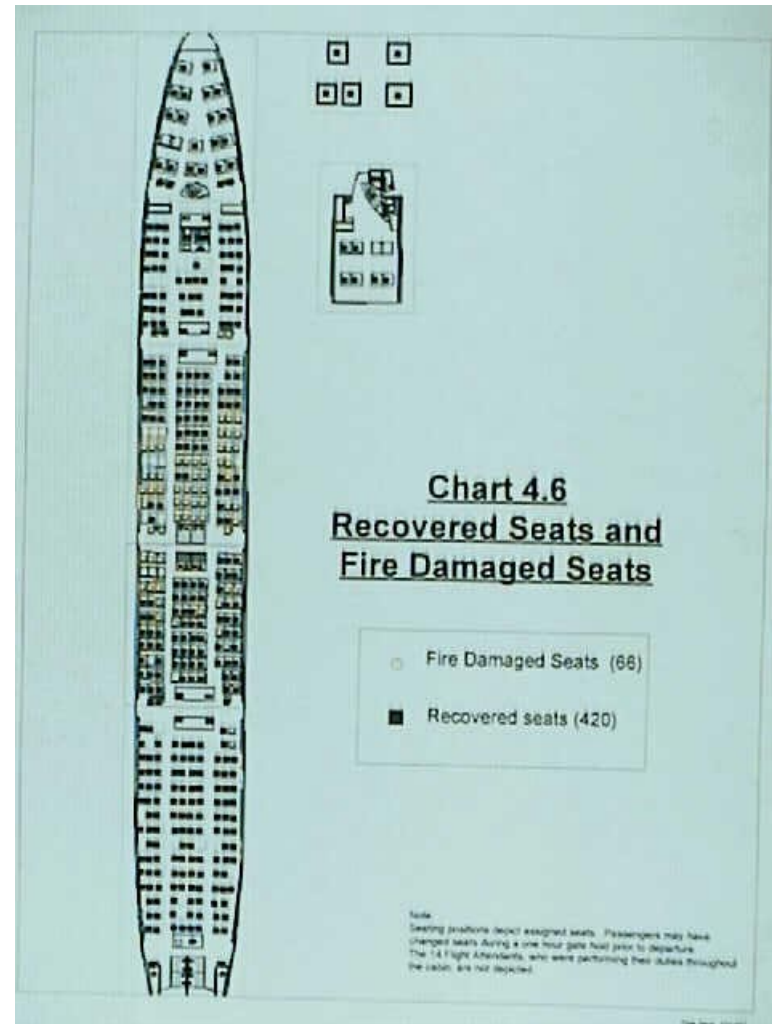


Chart 4.6 Recovered Seats and Fire Damaged Seats

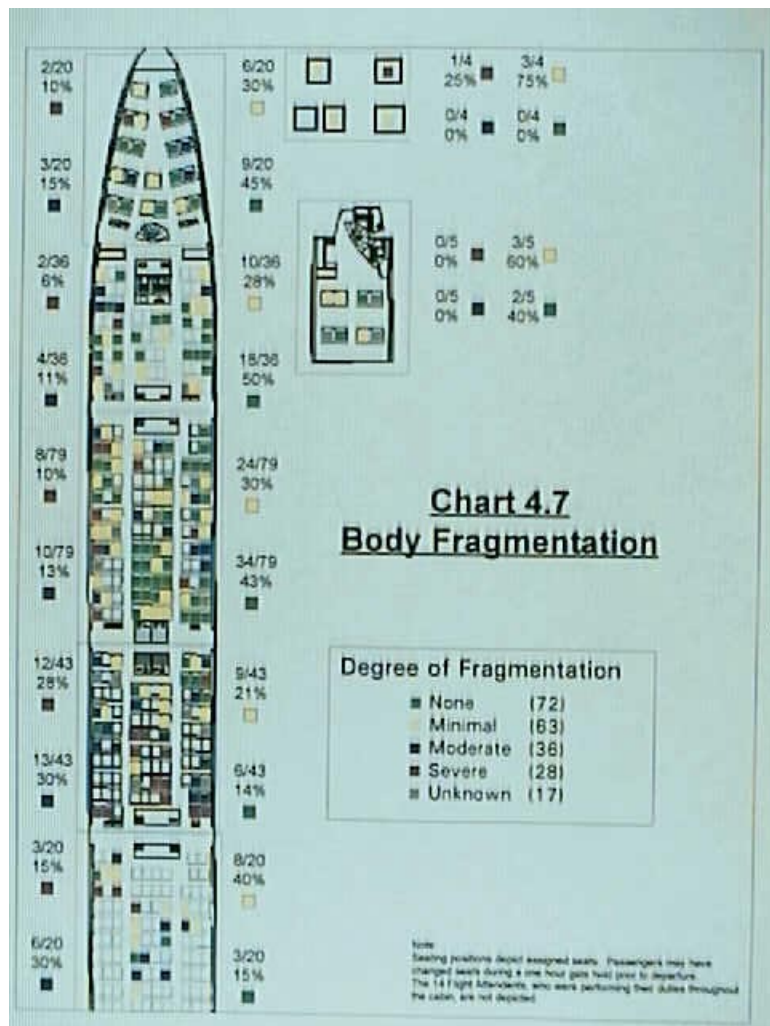


Chart 4.7 Body Fragmentation

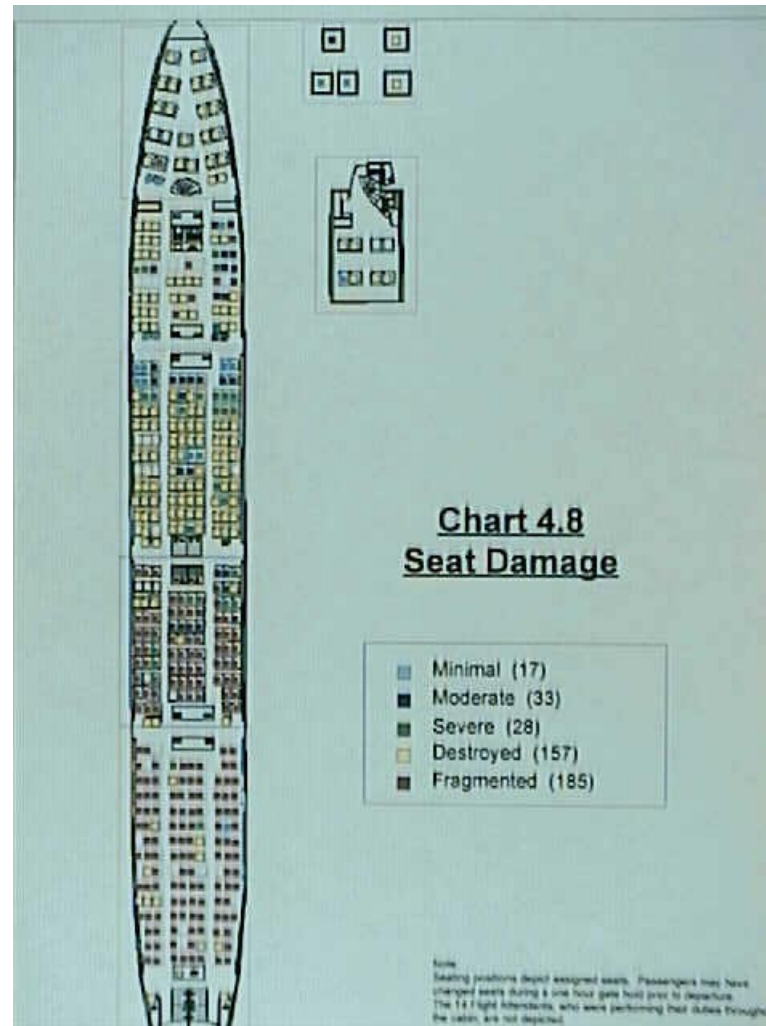


Chart 4.8 Seat Damage

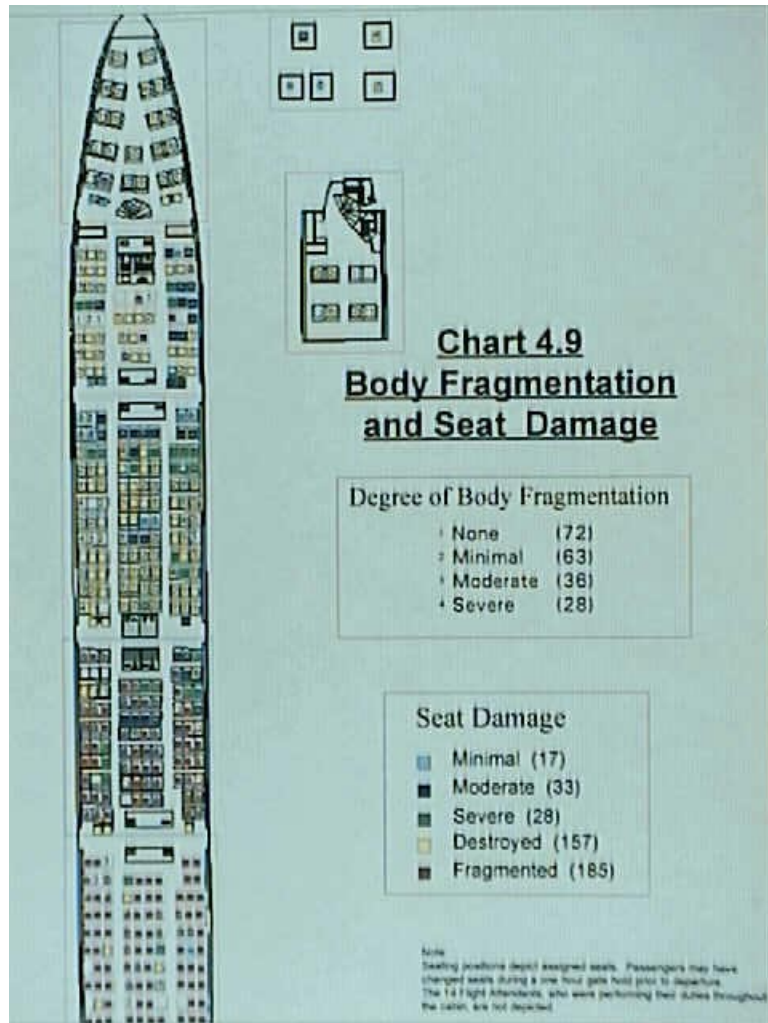


Chart 4.9 Body Fragmentation and Seat Damage

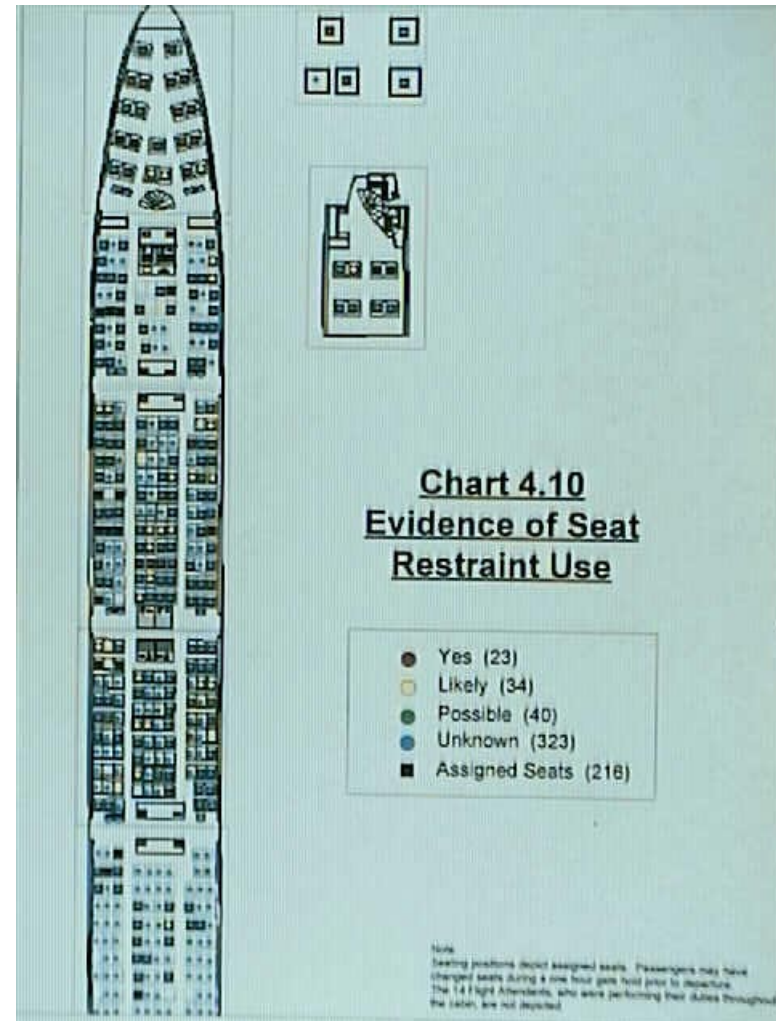


Chart 4.10 Evidence of Seat Restraint Use

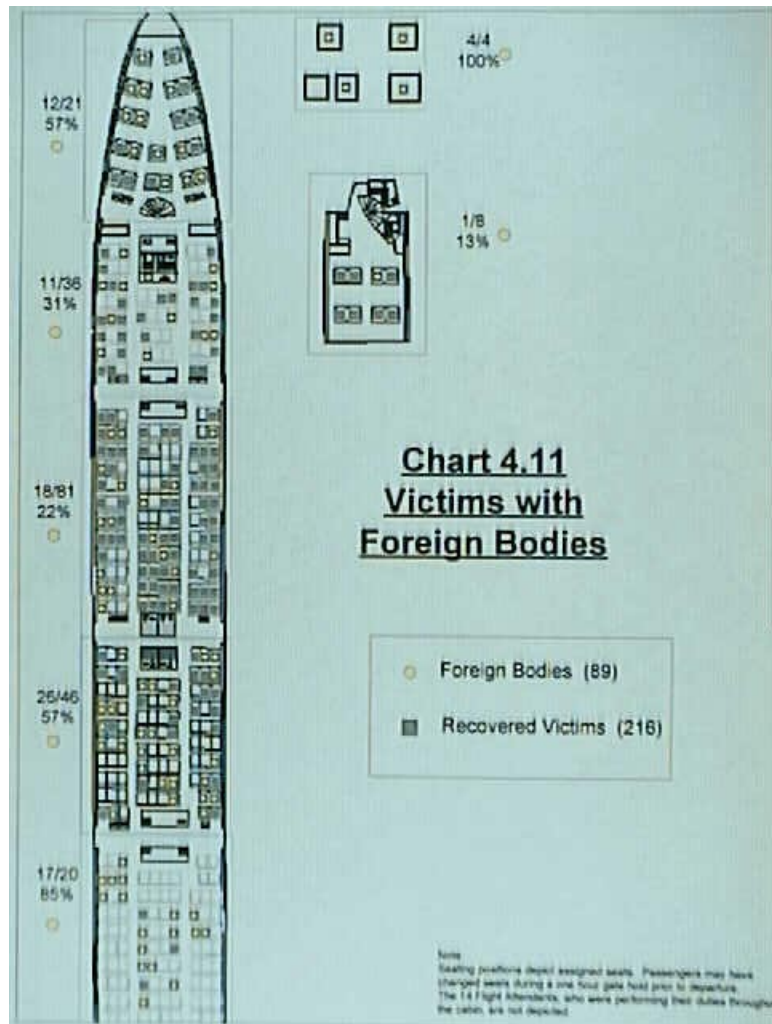


Chart 4.11 Victims with Foreign Bodies

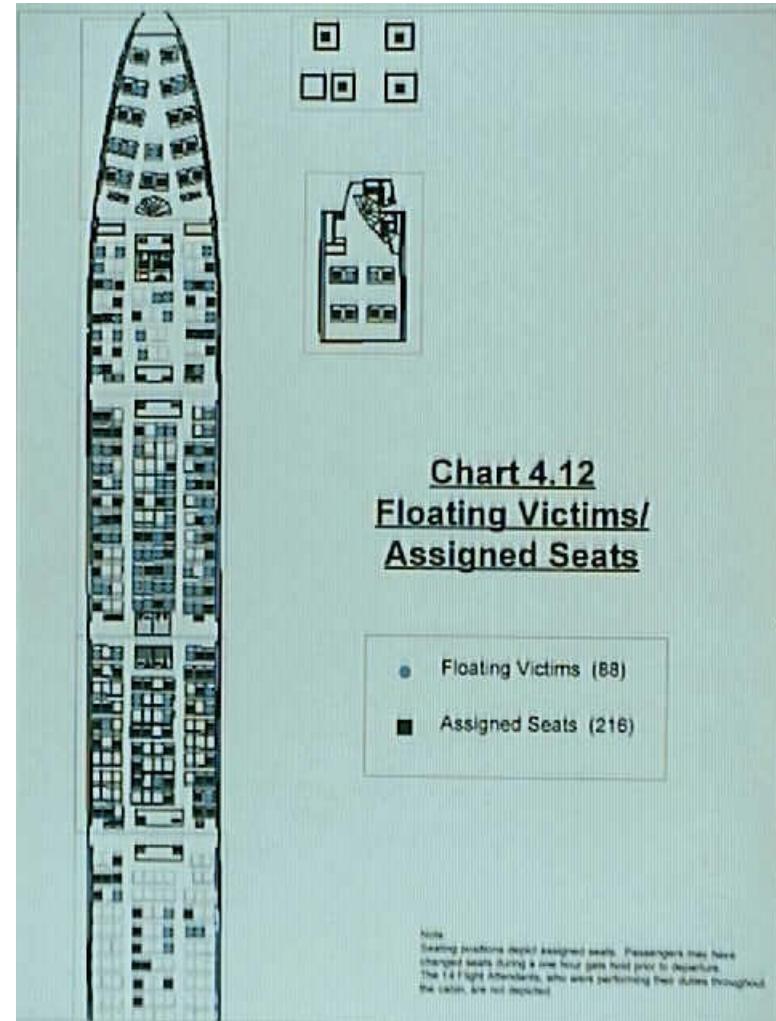


Chart 4.12 Floating Victims/Assigned Seats

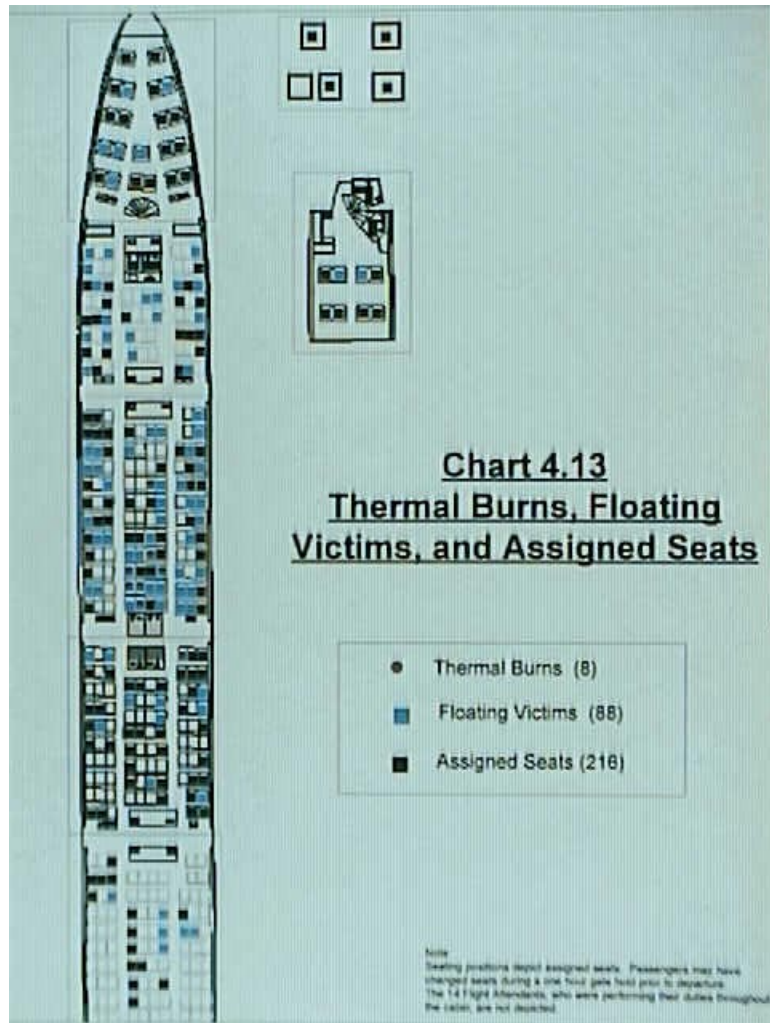


Chart 4.13 Thermal Burns, Floating Victims, and Assigned Seats

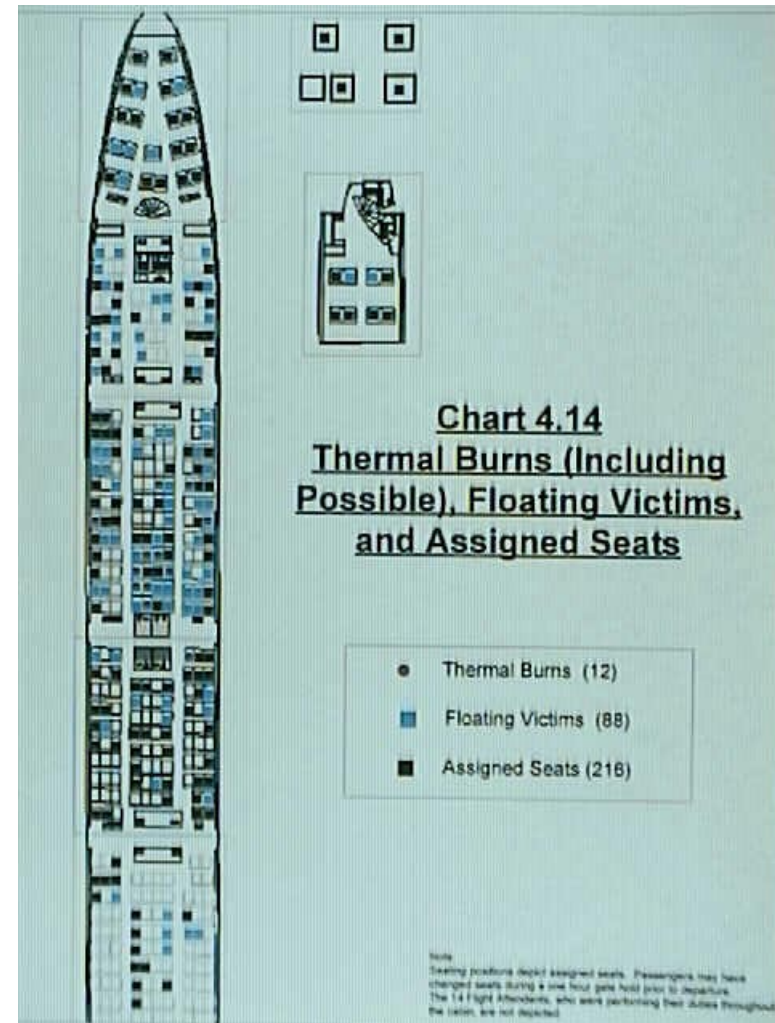


Chart 4.14 Thermal Burns (Including Possible), Floating Victims, and Assigned Seats

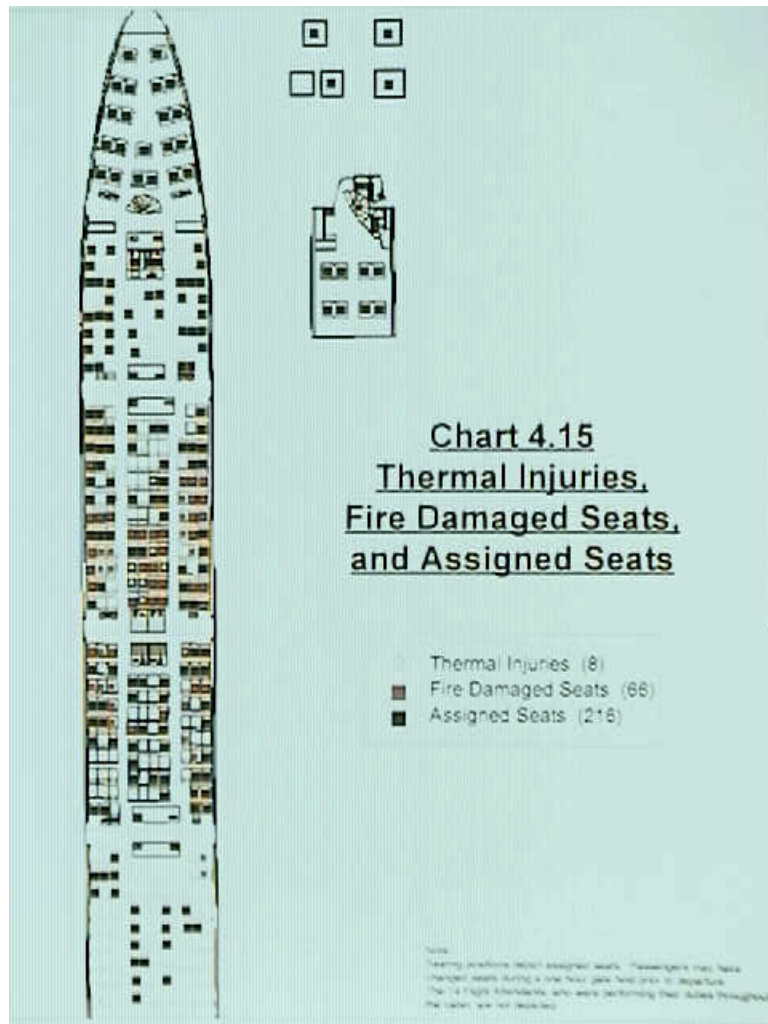


Chart 4.15 Thermal Injuries, Fire Damaged Seats,
 and Assigned Seat

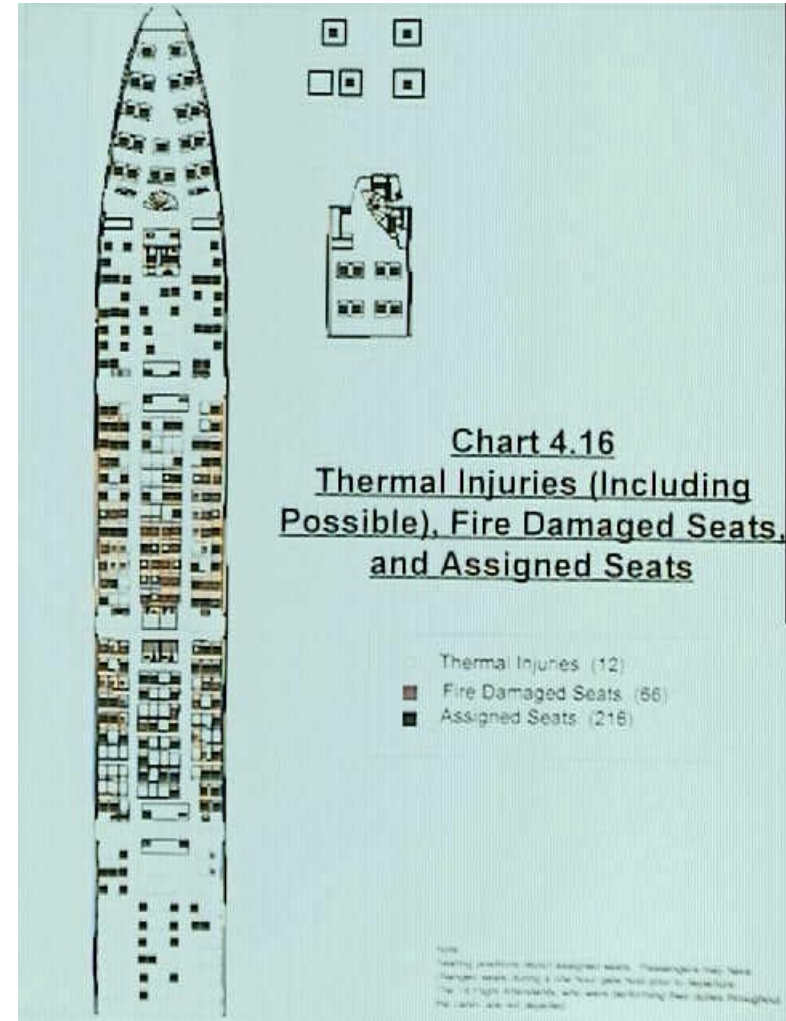


Chart 4.16 - Thermal Injuries (Including Possible),
 Fire Damaged Seats, and Assigned
 Seats

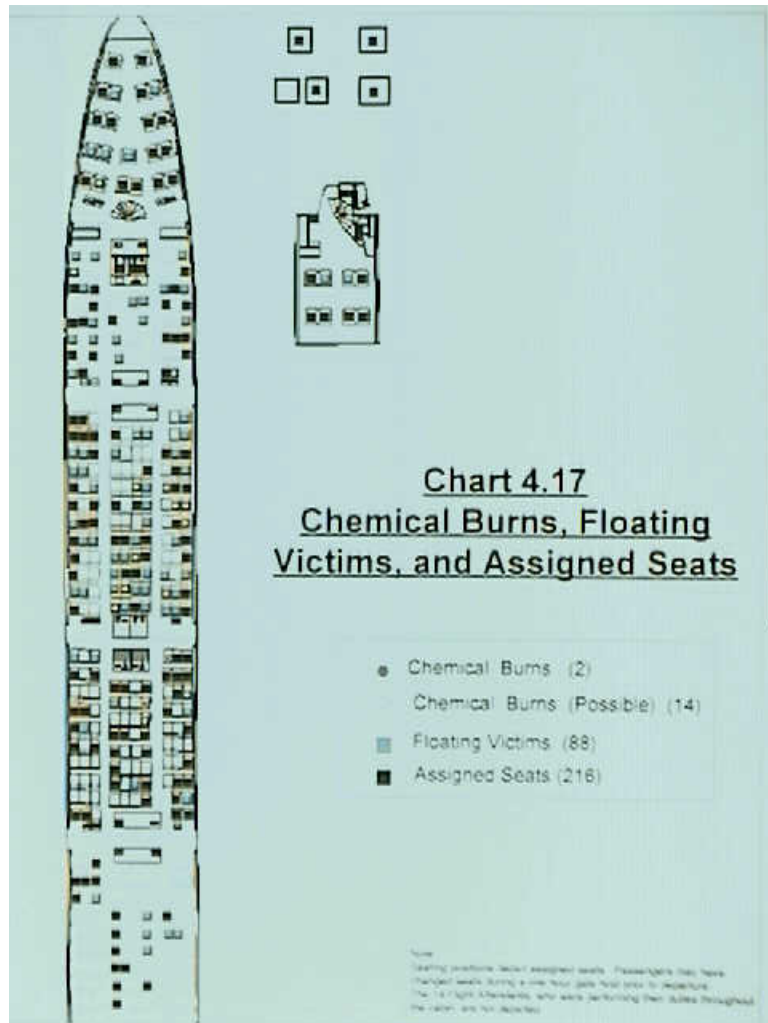


Chart 4.17 Chemical Burns, Floating Victims, and Assigned Seats

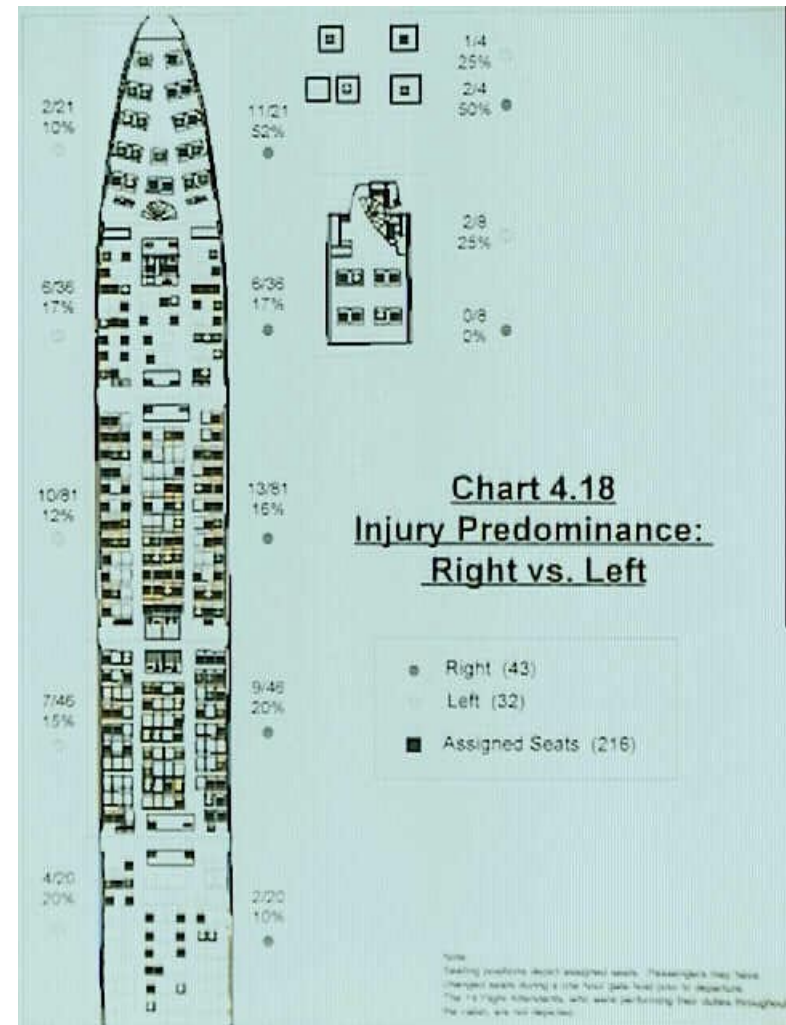


Chart 4.18 Injury Predominance: Right vs. Left

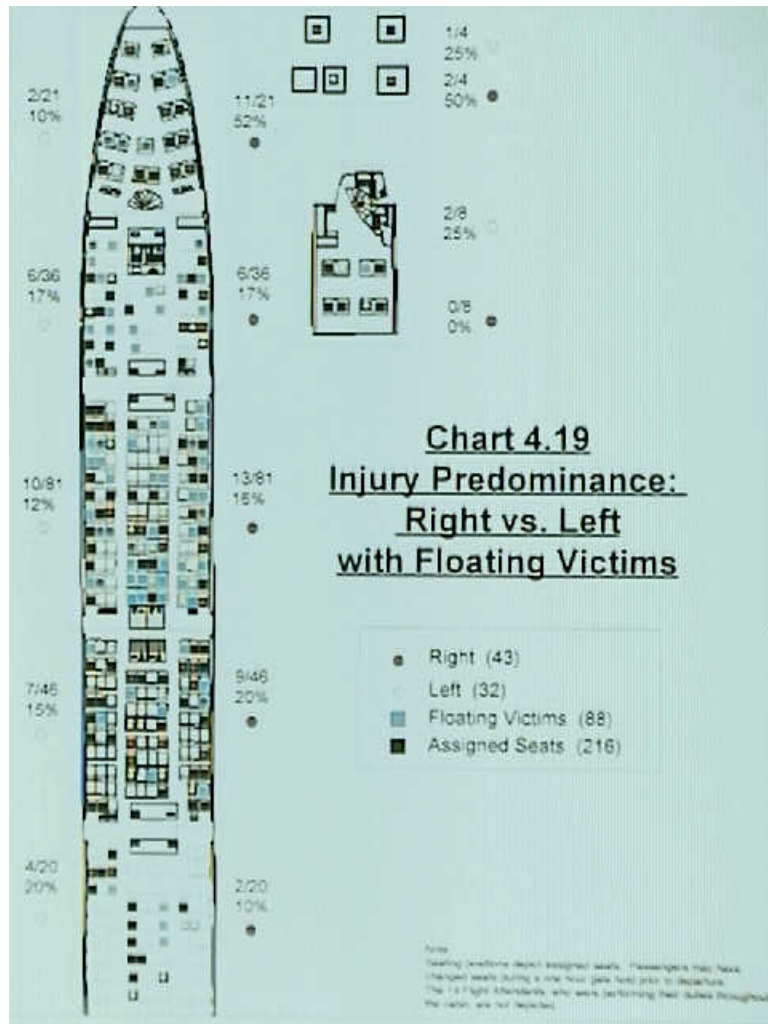


Chart 4.19 Injury Predominance: Right vs Left with Floating Victims

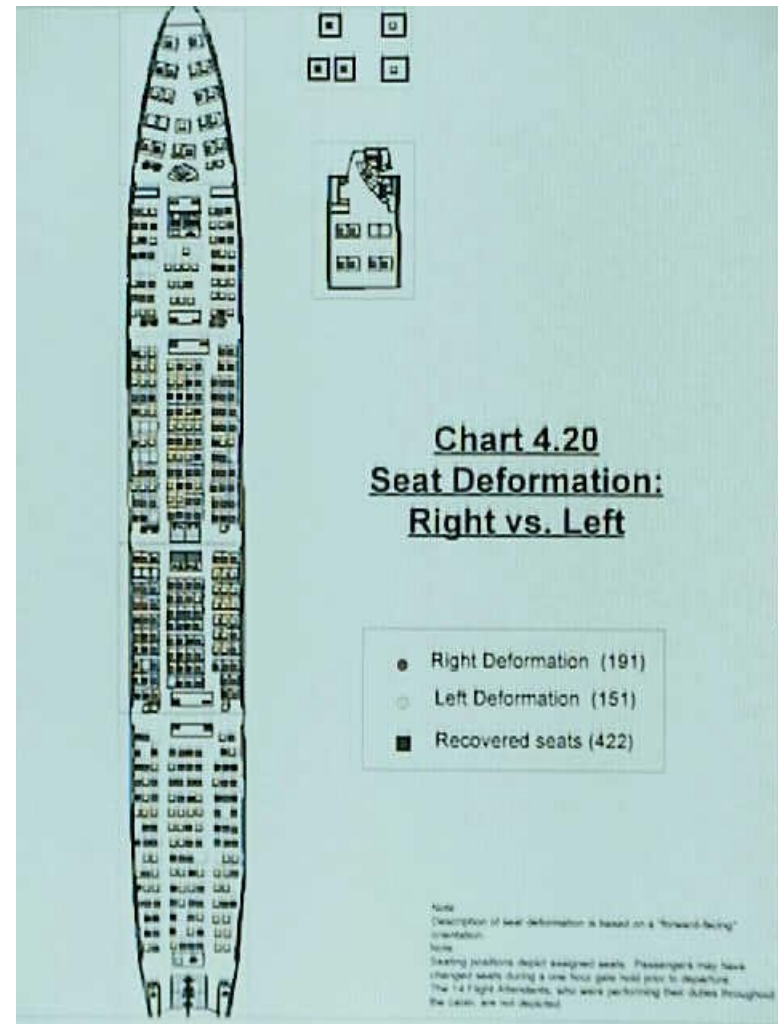


Chart 4.20 Seat Deformation: Right vs. Left

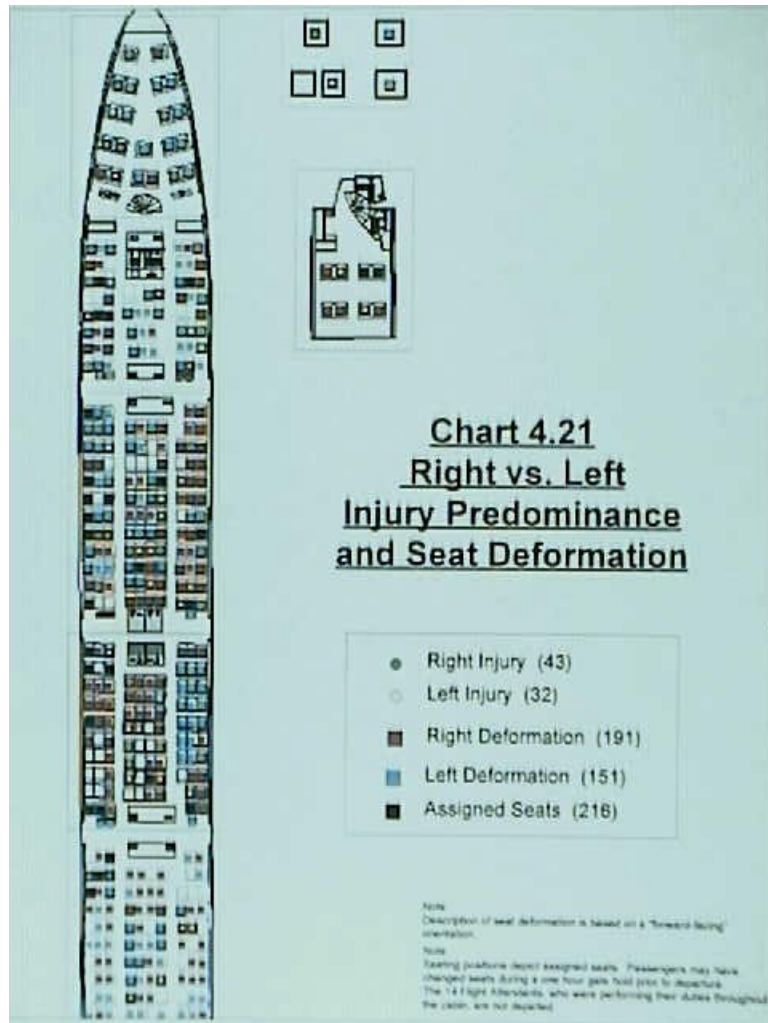


Chart 4.21 Right vs. Left Injury Predominance and Seat Deformation

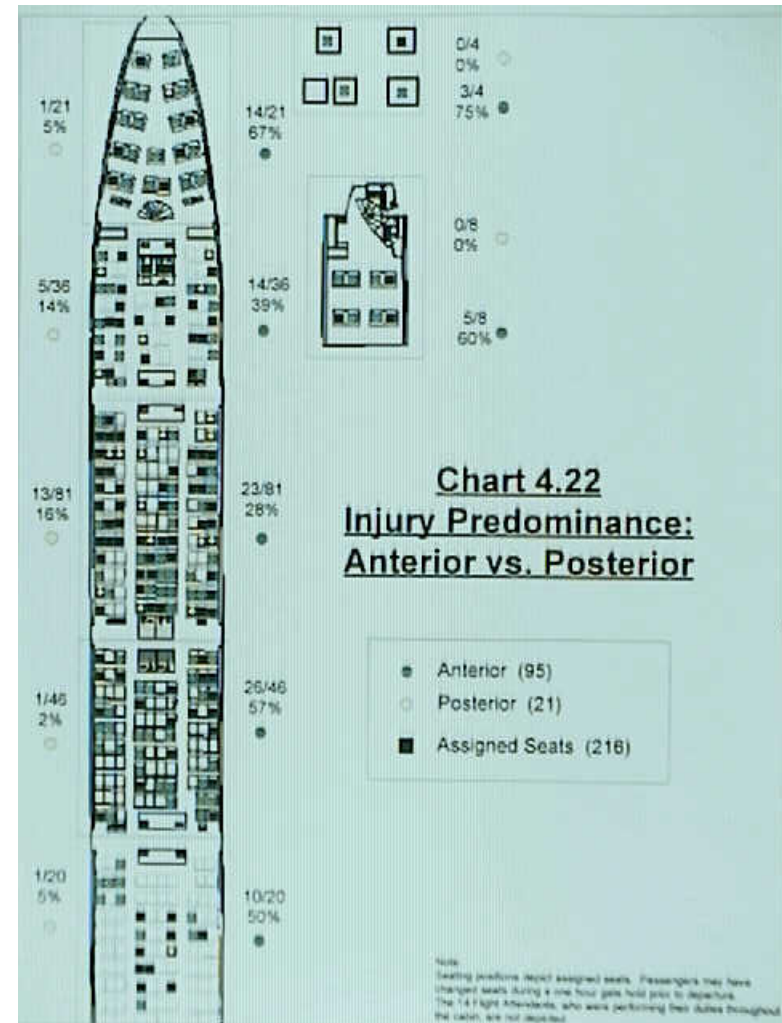


Chart 4.22 Injury Predominance: Anterior vs. Posterior

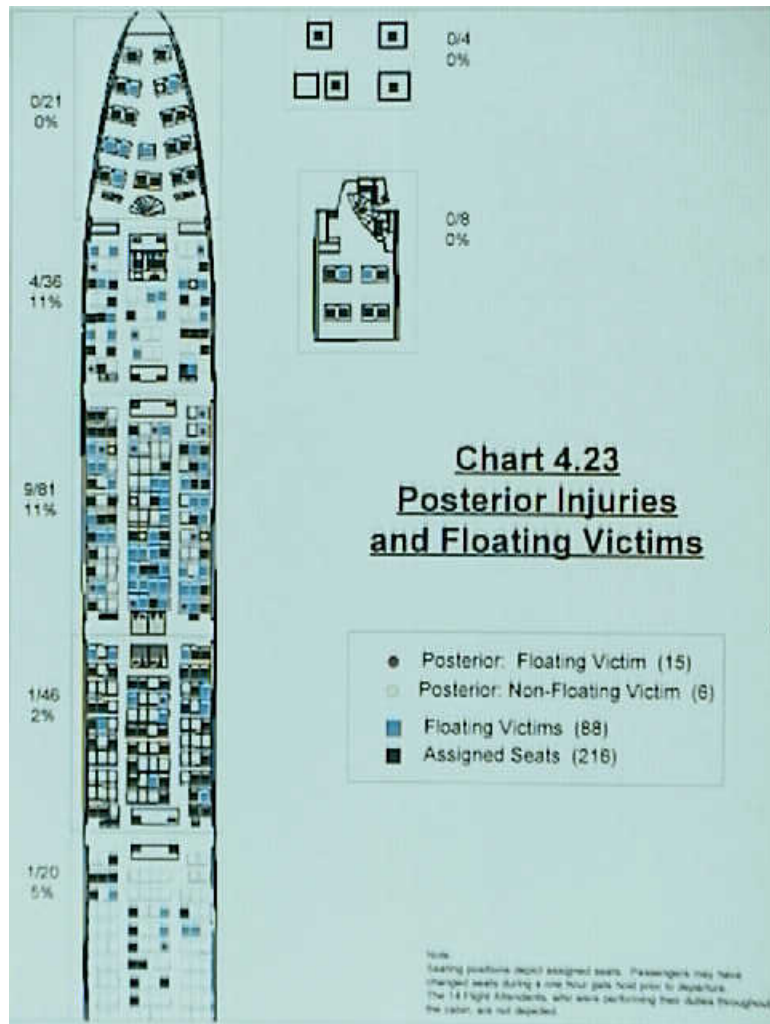


Chart 4.23 Posterior Injuries and Floating Victims

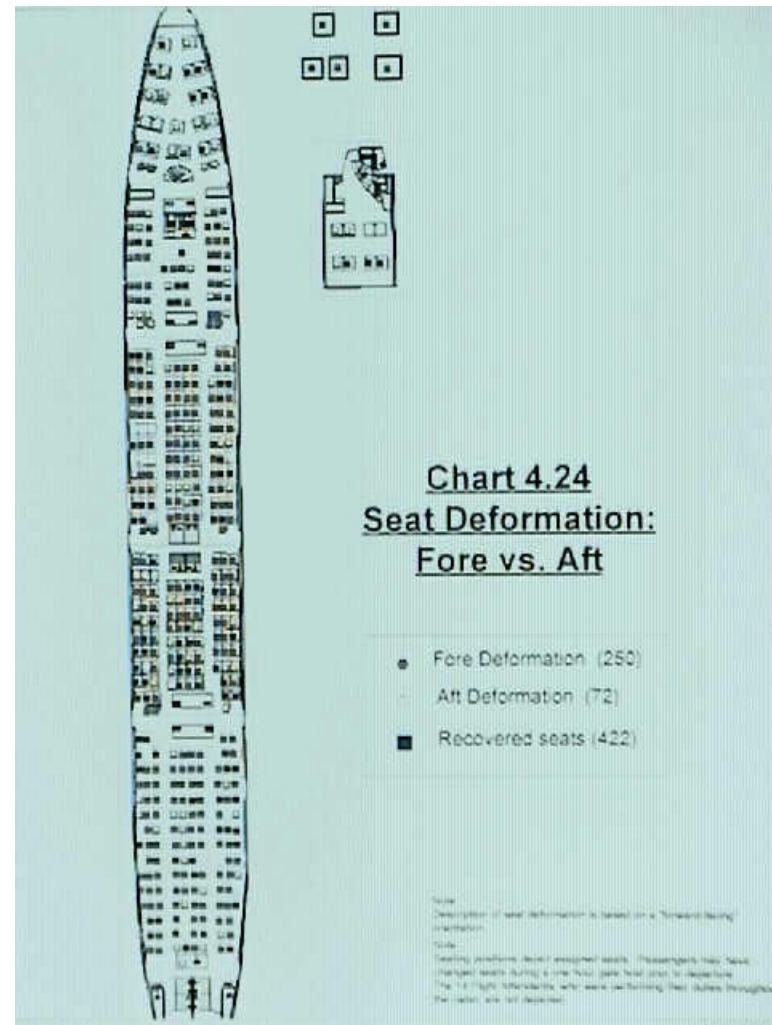


Chart 4.24 Seat Deformation: Fore vs. Aft

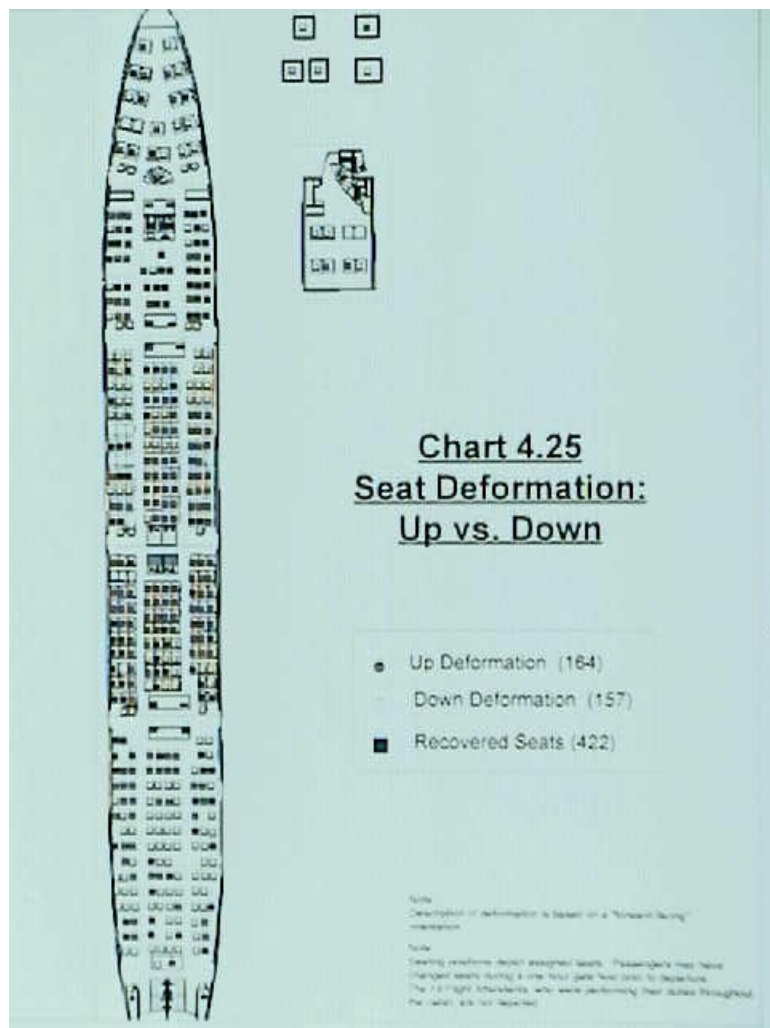


Chart 4.25 Seat Deformation; Up vs. Down

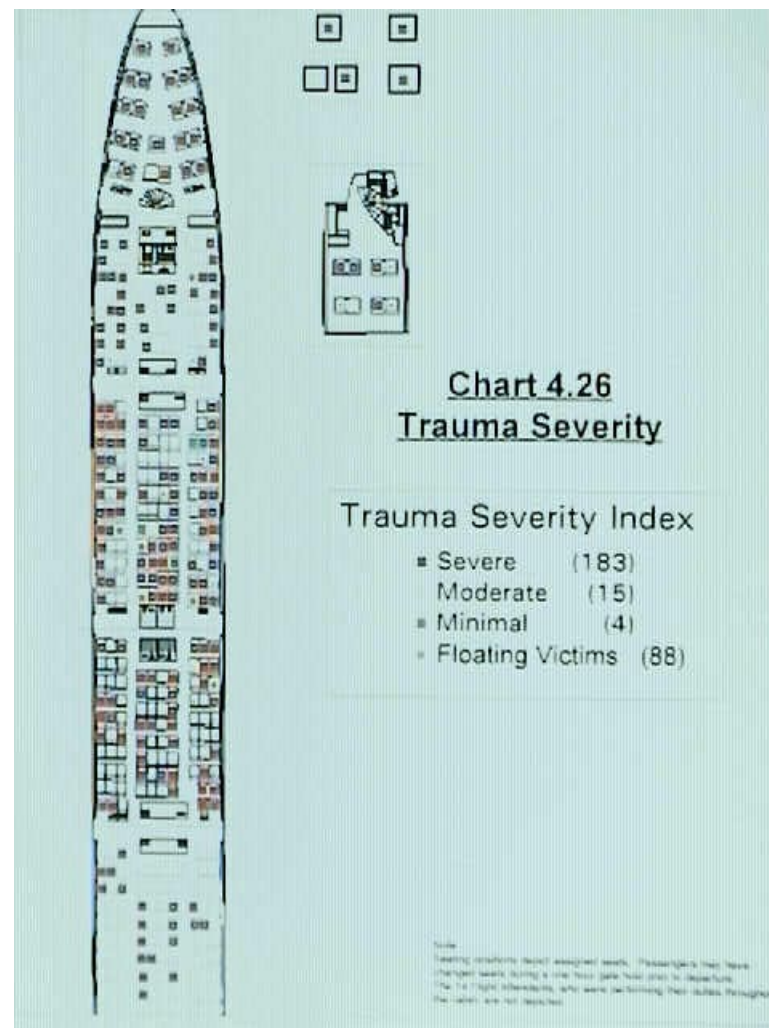


Chart 4.26 Trauma Severity

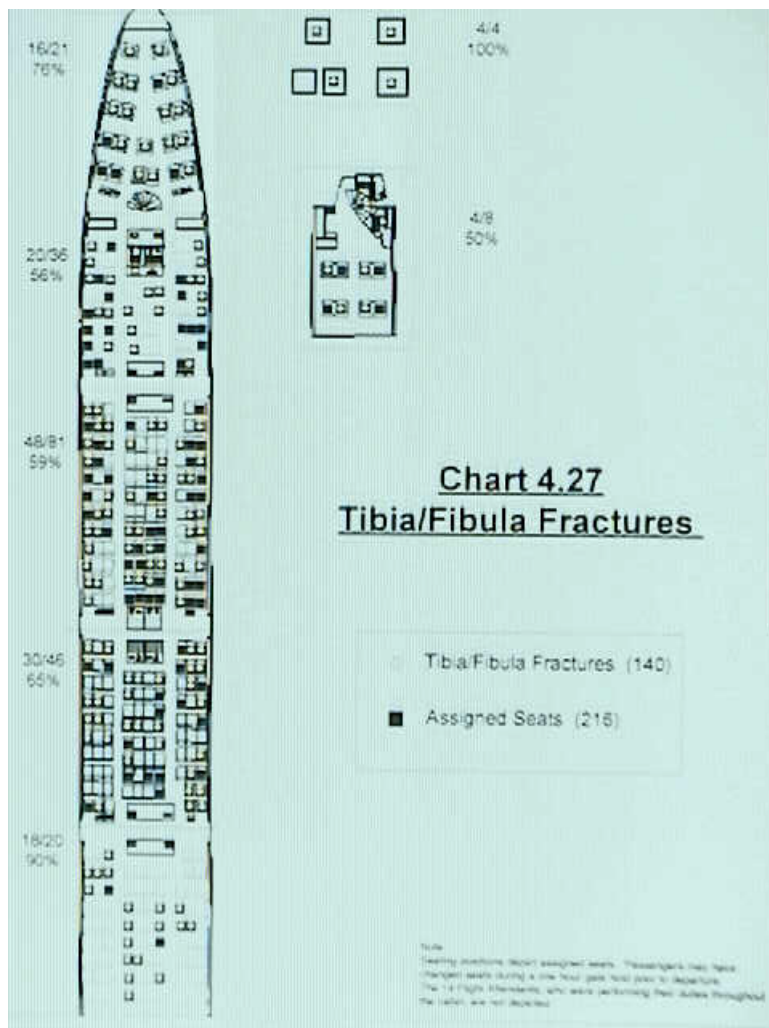


Chart 4.27 Tibia/Fibula Fractures

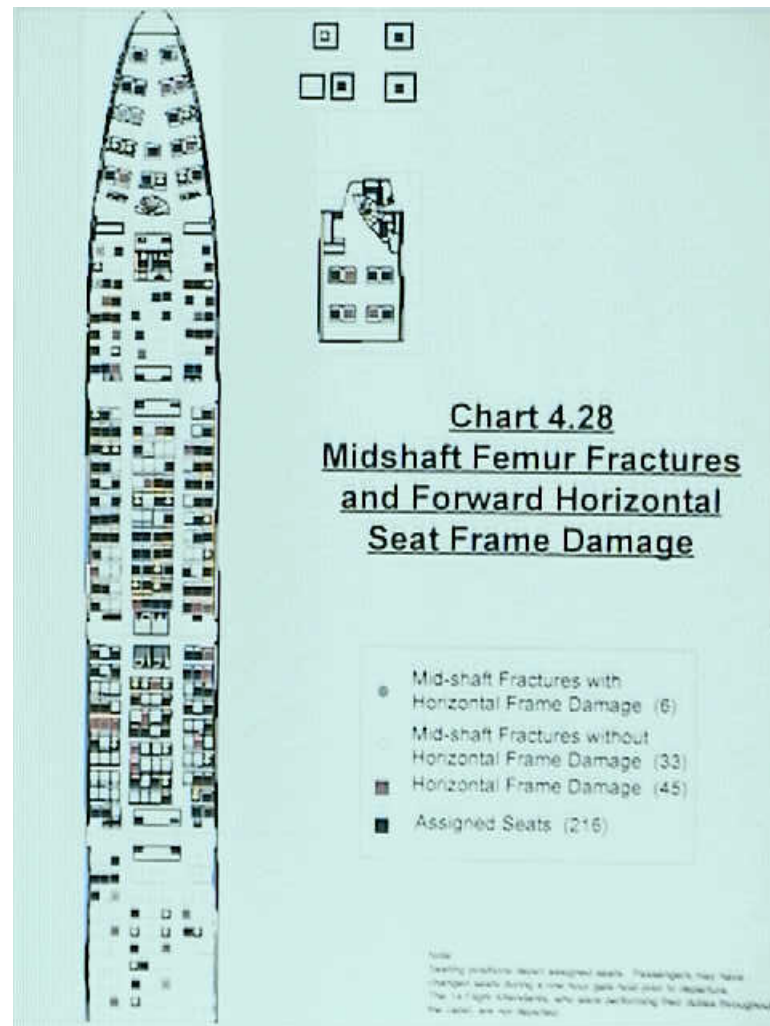


Chart 4.28 Midshaft Femur Fractures and Forward Horizontal Seat Frame Damage

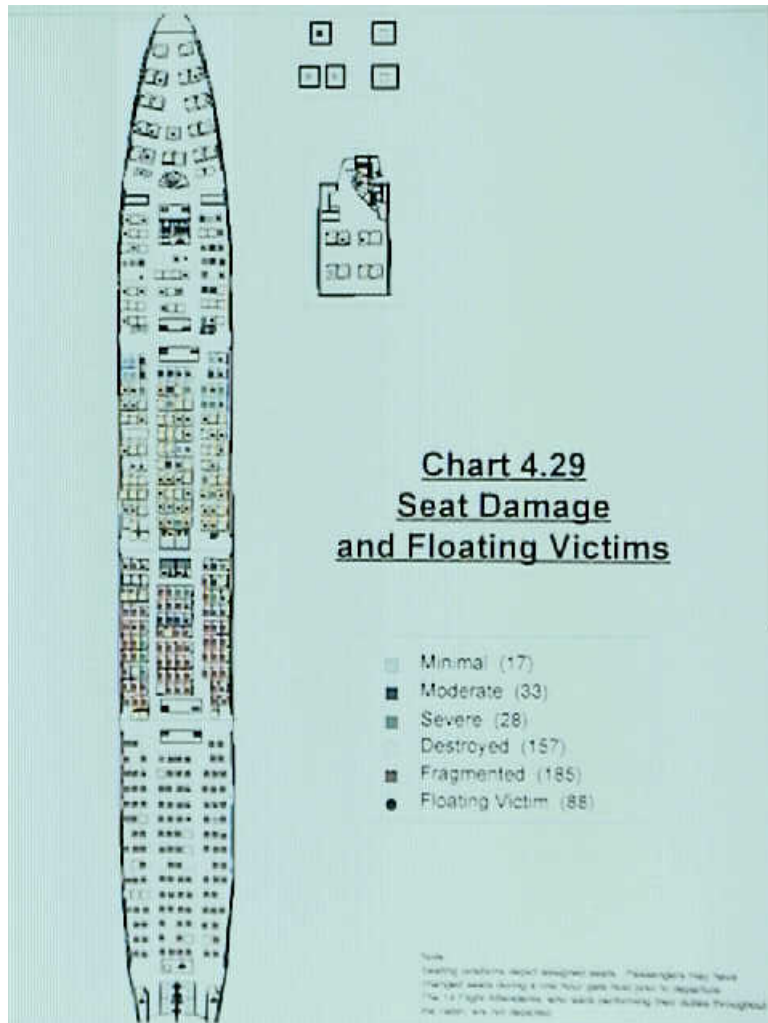


Chart 4.29 Seat Damage and Floating Victims

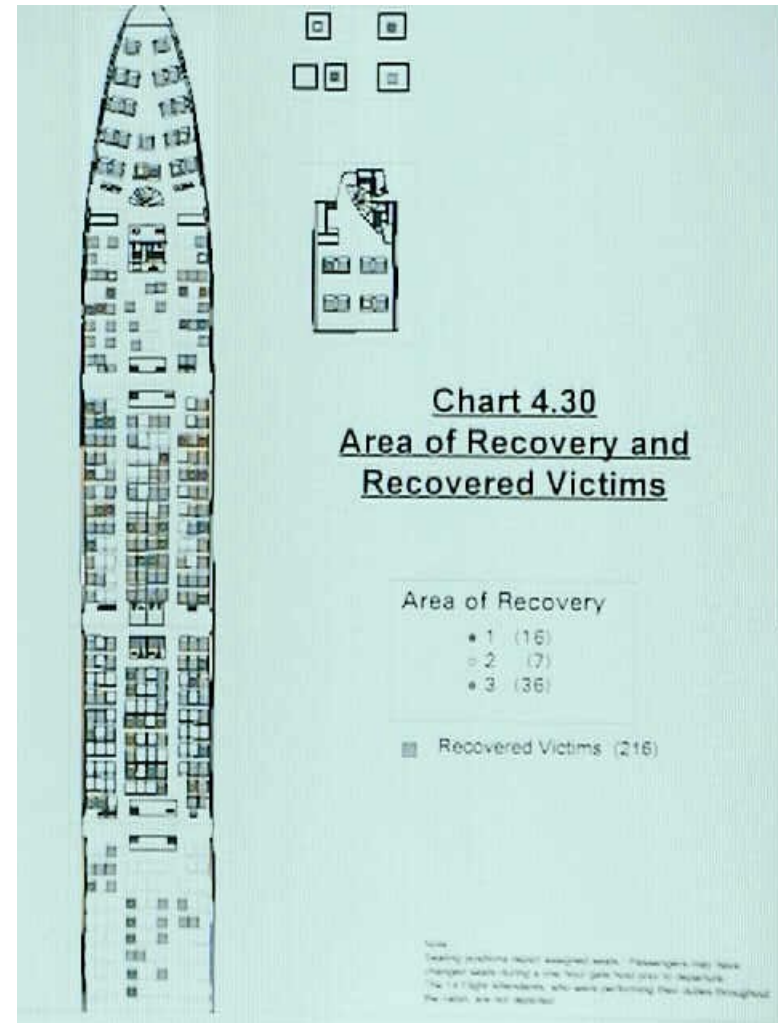
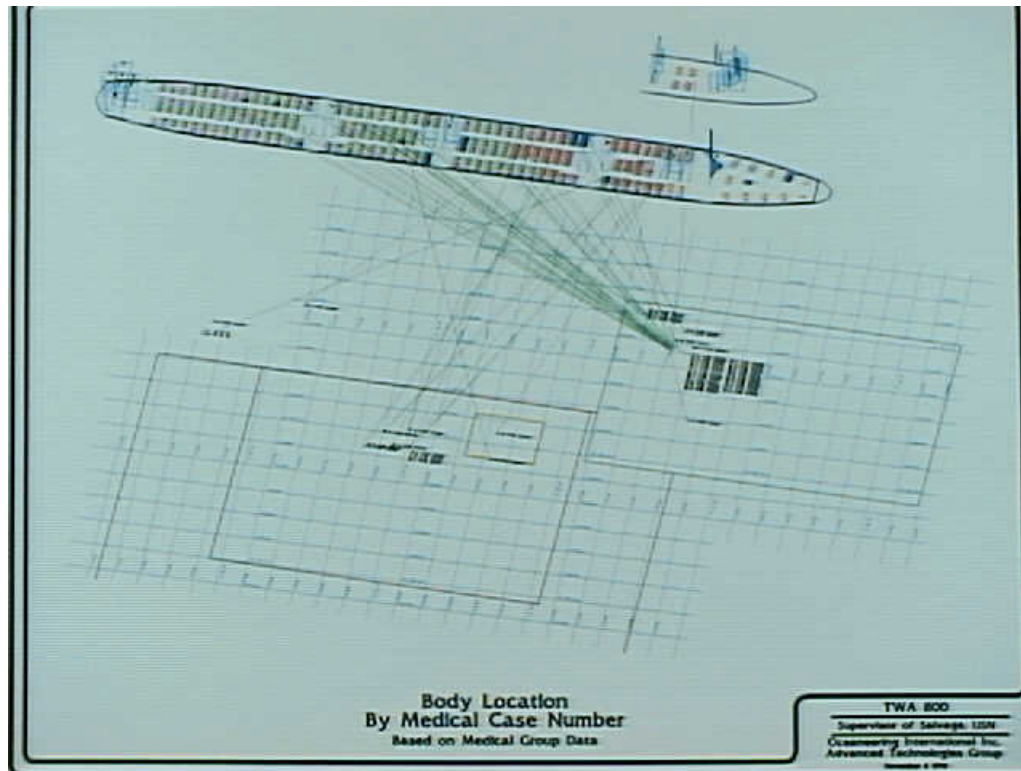


Chart 4.30 Area of Recovery and Recovered Victims



Body Recovery Location Plot (1 Chart)